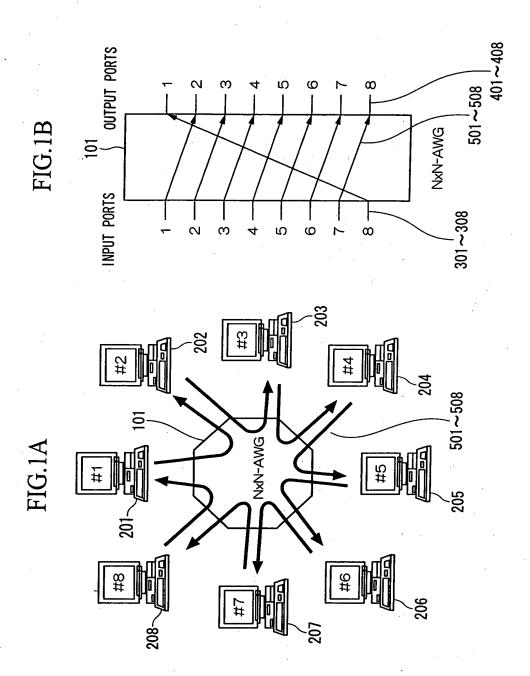
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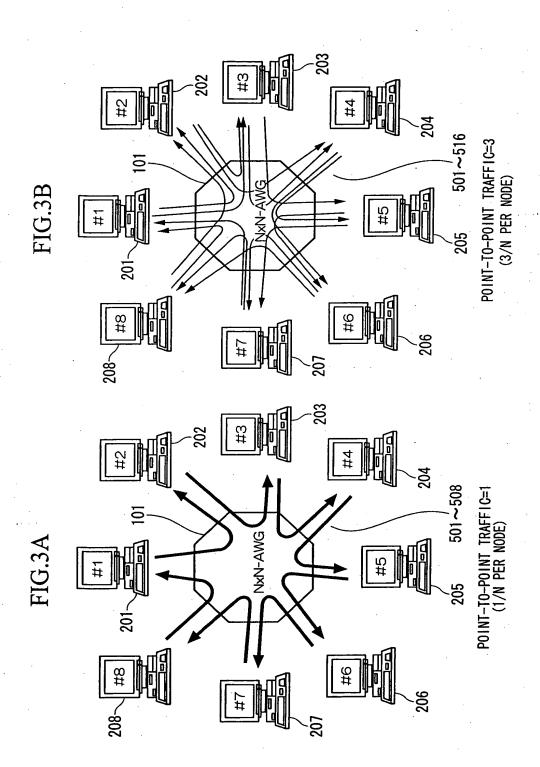


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		<b>ω</b>	78	71	75	73	74	75	79/	77	7	
		7	7۲	38	71	72	73	47	75	76	7	
		9	97	77	78	7.1	75	13	74	75	1	
B	ORTS	2	75	76	77	78	17	72	λ3	74	1	
FIG.2B	OUTPUT PORTS	4	74	75		77	78	17	72	у3	]	
压	00T	ო	λ3	4/	75	97	7,7	78	7.1	12		
		2	77	λ3	74	75	97	۲۲	38	71		
	/	-	71	12	13	λ4	75	91	ĹΥ	78		
ж			1	2	3	4	5	9	7	80		
1301~1308	$\left\langle \right\rangle$	STROG TUGNI										
1301		ω	38	67	110	λ11	112	λ13	7.14	115		
		7	2۲	γ8	6γ	λ10	111	7,12	λ13	210 211 212 213 214		
	\	9	91	7۲	γ8	6γ	, 10, 11, 10,	111	112	113		
A	RTS	2	/۲۶	91	۲۲	78	67	110	111	112		
FIG.2A	OUTPUT PORTS	4	74	/sr	76/	λ7	γ8	67	λ10	λ11		
FI	OUTPI	8	λ3	[] [4]	λ5	γе	۲۲	у8	79	210		
		2	757	λ3	74	λ5	97	77	γ8	γ9		
		-	71	72	73	74	75	97	77	78		
			-	2	က	4	5	9	_	ω	•	
			<b>_</b>	•	STAC	IN TU	dN1					

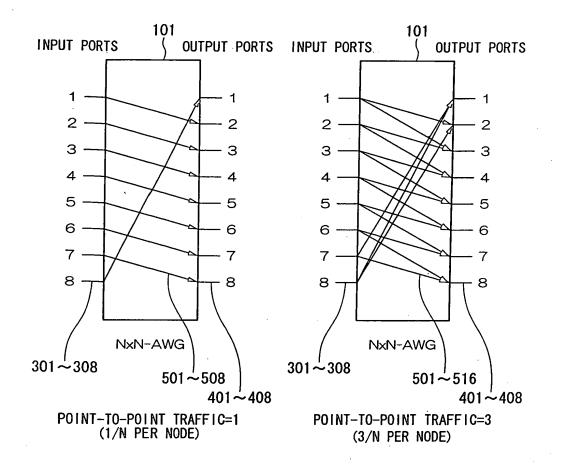
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# FIG.4A

# FIG.4B

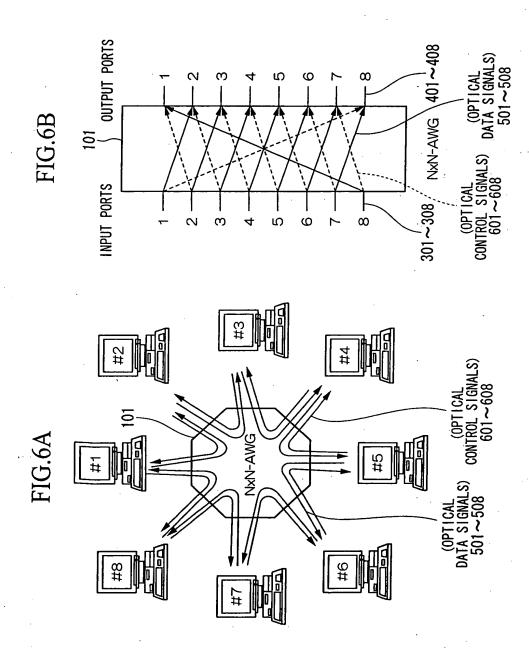


**4**)

								-		ė
		ω	78	7.1	72	73	74	72	10°	77
		1	77	78	۲	72	73	47	75	76
		9	76	77	78	-	777	73	74	75
B	RTS	5	75	76		78	7	72	73	74
FIG.5B	OUTPUT PORTS	4	74	72	707	77	78	71	72	73
H	OUTF	е	73/	47/	75	97	77	78	71	72
		72	775	у3	74	75	γ9	77	78	
	/	-	71	12	уз	74	75	97	77	
9			_	2	ო	4	2	9	7	ω
1301∼1316					S15	70q .	ruqni			
1301		ω ω	78	79	710	711	112	7.73	7,14 4,14	115
		2	77	γ8	13	λ10	711	3.12	λ13	λ14
		9	уе	77	γ8	67	710	111	112	113 114
<b>√</b> !	TS	2	32	91		78	19	λ10	111	112
FIG.5A	OUTPUT PORTS	4	14/	72	76	7۲	18	γ3	110	711
FI(	OUTPL	3	73	774	15	γе	۲۲	78	67	710
		2	775	λ3	74	λ5	97	7۲	78	767
		1	71	λ2	у3	74	75	γ6	77	78
			-	7	ო	4	വ	9	^	ω

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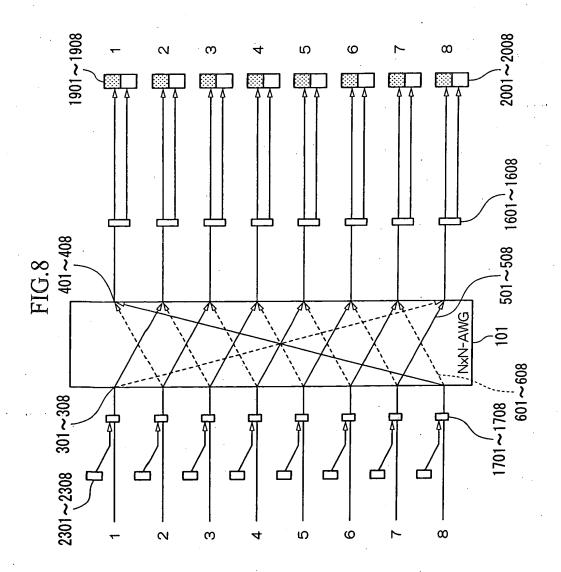


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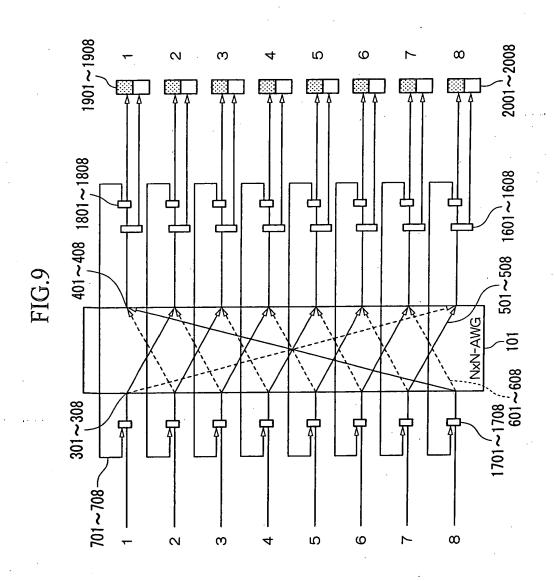
		ω	78	7	12	уз	74	15	76	77		
	œ	7	77	у8	11	12	73	44/	75	76		
	~1308	9	76	77	38	71	775	уз	74	35		
$\sim$	1301~1308	2	75	9γ	7۲	/6/ ///	71	12	73	74		
FIG.7B	130	4	14	15	/9Y/	77	3γ	71	72	εγ		
FI(	OIITPI	т	73	744	37	91	2۲	γ8	11	75		
		2	727	λ3	74	75	97	7,7	8γ	71		
		-	17	12	λ3	14	15	у	2۲	7,8		
	80		-	2	3	4	5	9	2	8		
	1401∼1408 ^	<del>/</del>	STROG TUGNI									
	40	7										
	_	1 ~	- ω	6	0	Ξ	2	3	43	15		
	_	8	78	49	λ10	111	112	113	714	115		
	_	7 8/	17 18	6Y 8Y	19 110	110 111	111 112	1,12; 1,13	λ13 (λ)			
	_	<u> </u>	(1000000)			19 110		111 112	λ13 (λ)			
A		2 9	77	γ8	27 81 71 St	λ10	19 (110) 111	111 112	052	112 113 114 115		
G.7A		2 9	۲۲ 9۲	81 71 91 31	61 81	017 87 87 27	110 711	7,12	112 113	112 113 114		
FIG.7A	STADA TIBILI	2 9	13 14 15 16 17	81 71 91 31	15 16 17 18 19	017 87 87 27	19 (110) 111	110 111 (112)	11 712 713			
FIG.7A	STADA TIBILI	2 9	14 15 16 17	87 ZY 97	15 16 17 18 19	118 19 110	118 310 111	710 711 711	110 211 212 213	19 210 211 212 213 214		
FIG.7A		3 4 5 6 7	13 14 15 16 17	13 14 15 16 17 18	81 71 BL	017 87 87 27 97	117 27 27 27 27 27 27 27 27 27 27 27 27 27	78 39 210 211 212	39 210 211 212 213	110 111 112 113 114		
FIG.7A	STADA TIBILI	3 4 5 6 7	12 13 14 15 16 17	14 15 16 17 18	12 22 26 27 28 29	017 67 878 27 97 31	112 017 8 38 10 210 211	7   18   19   110   111   112	1 28 210 211 212 213	19 210 211 212 213 214		

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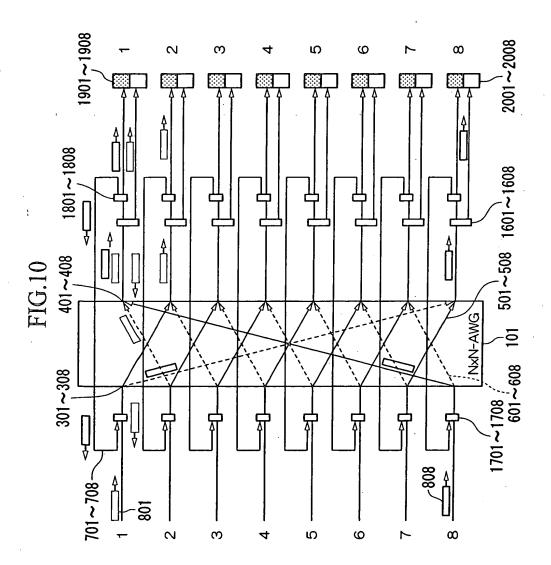
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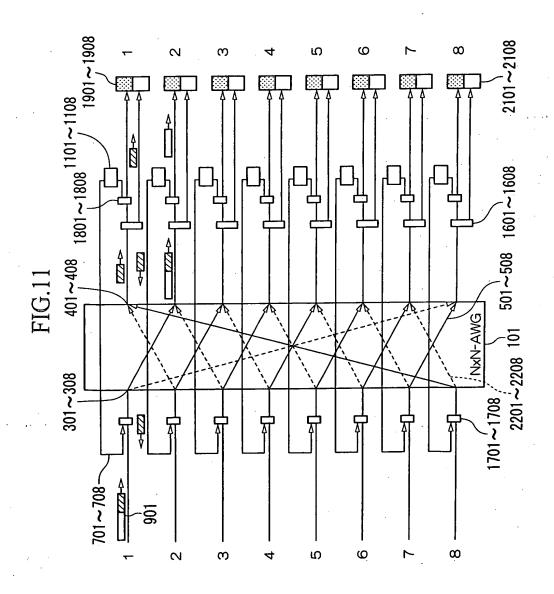
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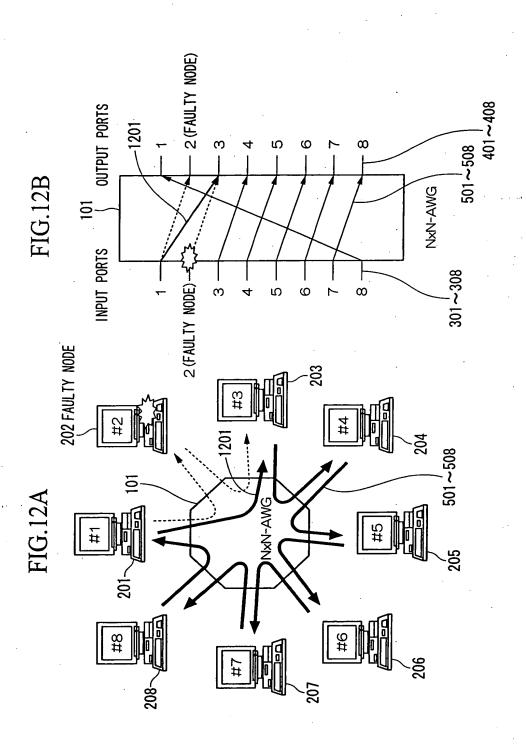
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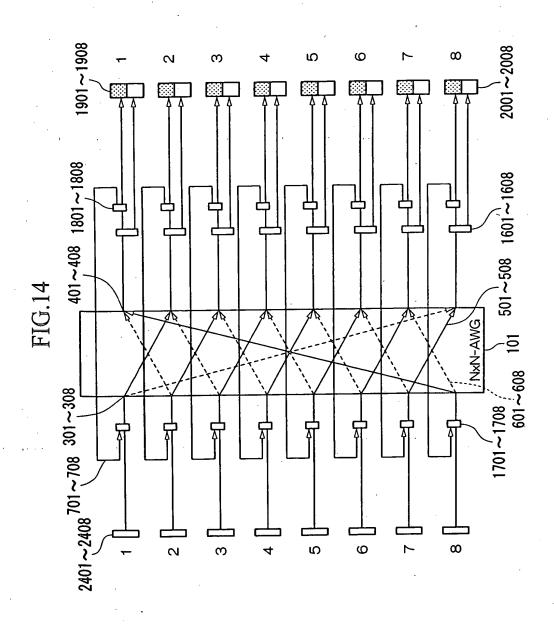


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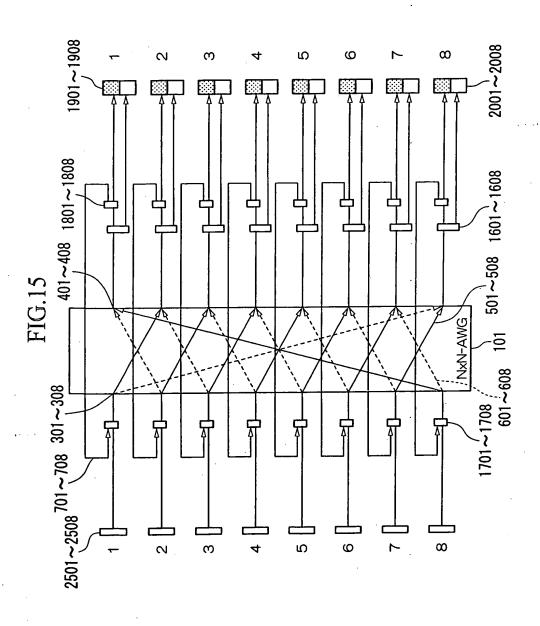
		∞	78	71	72	23	74	75	76	77	
		7	77	78	77	72	73	4	15	97	
	1508	9	97	77	78	71	775	у3	74	75	
B	1501~1508 IRTS /	/2	λ5	уе	۲۲	78/	77	12	γз	λ4	
FIG.13B	308 1501 OUTPUT PORTS	4	14/	75	/6/ ///	77	78	71	12	13	
FIC	308 ИТРИ	ю	13	44	75	91	77	38	71	12	
	1301∼1308 \ outP	2	727	εγ	74	37	91	2χ	38	71	
	130	1	11	72	εγ	74	λ5	97	77	700	
			1	2	3	4	9	9	2	8	
					STR0	4 TU	dN1				
		œ.	γ8	79	λ10	111	112	λ13	7,14	115	
		7	7۲	λ8	19	λ10	۸11	112	λ13	λ14	
	-1508	9	γе	7۲	λ8	18, 19	100	110 111 1	112	112 113 114 115	
γ	1501~1508 RTS/	9/	75	уе	17	78	λ9	λ10	1,11	112	
FIG.13A	PO	4	14/	15	16/	77	γ8	79	710	711	
FI(	)8 OUTPUT	3	13	47	75	уγ	77	γ8	79	710	
	~1308 / ou	2	775	λ3	14	75	97	77	88	70	
	1301	-	71	12	λ3	14	15	уе	17	78	
			-	2	ო	4	5	9	7	80	
	•				 0K18	A TUG	INI				

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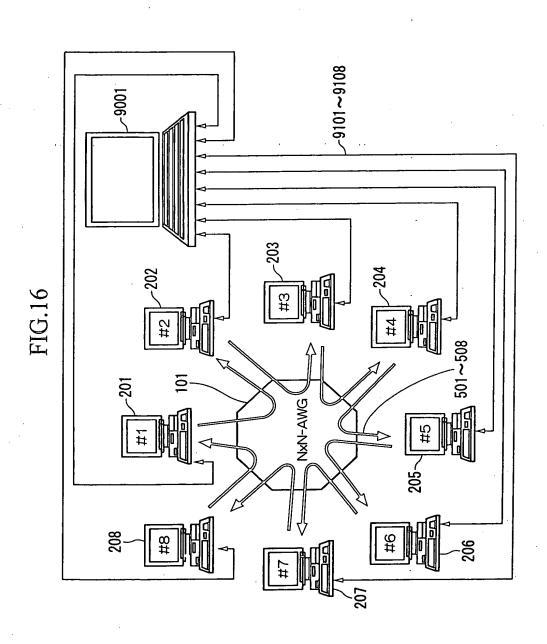
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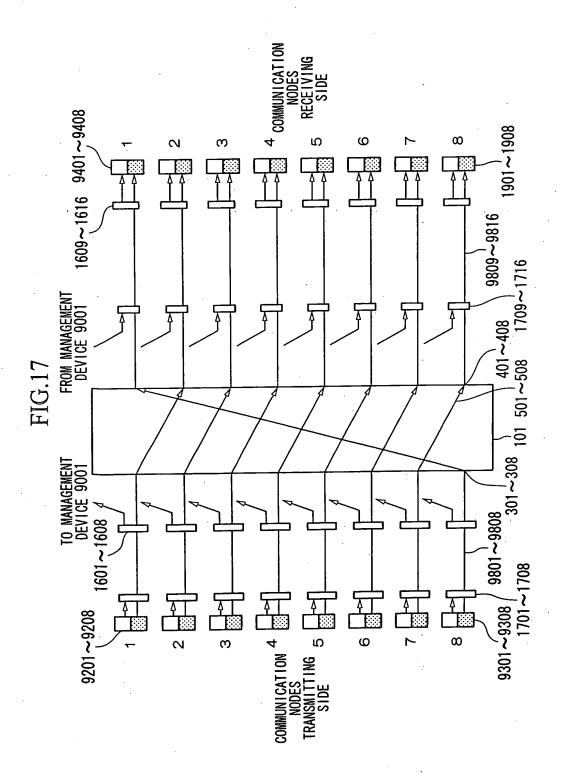
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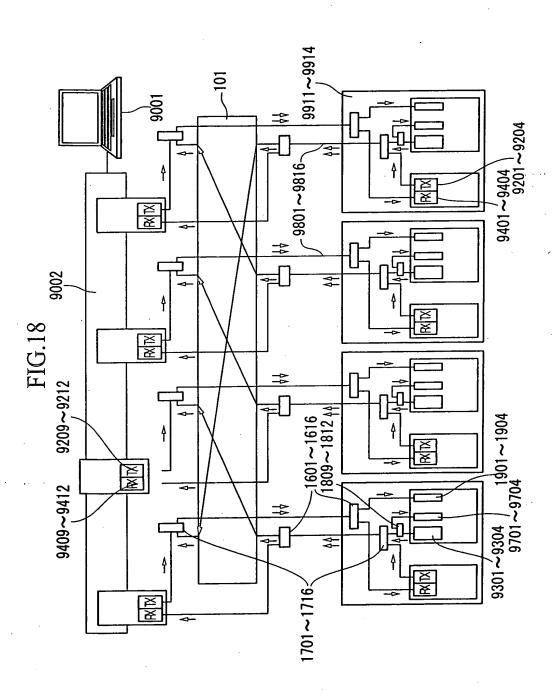
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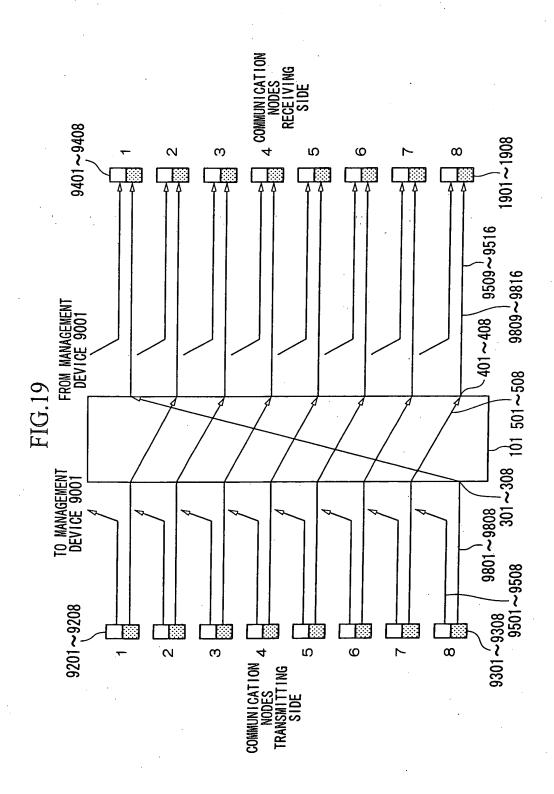
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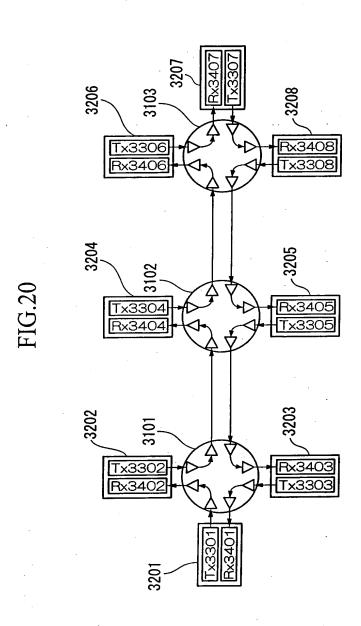


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Title: OPTICAL COMMUNICATION SYSTEM Inventors: Hiromasa Tanobe, et al. Atty. Ref.: 5259-000034

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FIG.21

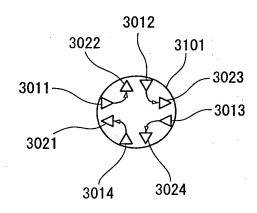


FIG.22

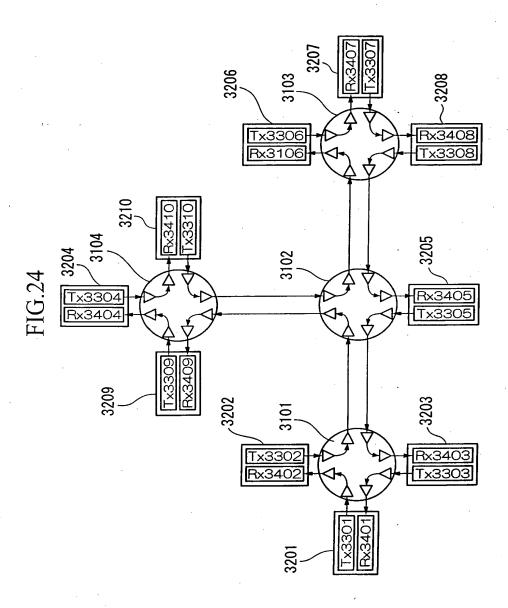
		3021	3022	3023	3024
PORTS	3011	λ1	) λ2/	λЗ	λ4
INPUT	3012	λ2	λЗ	λ4	λ5
OPTICAL	3013	λЗ	λ4	λ5	λ6
0	3014	λ4	λ5	λ6	λ7

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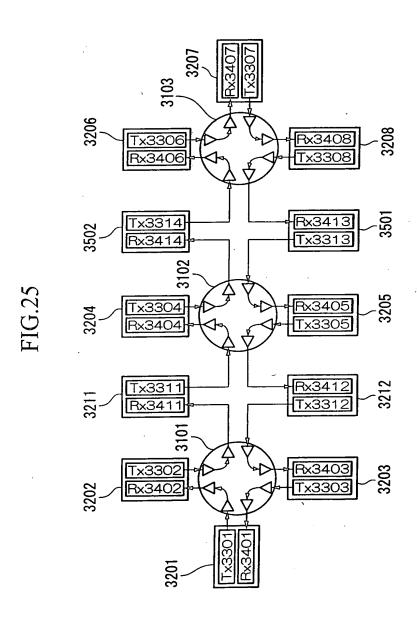
# FIG.23

		3021	3022	3023	3024
PORTS	3011	λ1	λ2	λЗ	λ4
. INPUT	3012	λ2	λЗ	λ4	λ1
OPT I CAL	3013	λЗ	λ4	λ1	/////////////////////////////////////
)	3014	λ4	λ1	λ2	λЗ

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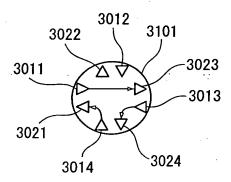


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FIG.26



**FIG.27** 

_					
"		3021	3022	3023	3024
INPUT PORTS	3011	λ1	λ2	λ3//	λ4
	3012	λ2	λЗ	λ4	λ5
OPT I CAL	3013	λЗ	λ4	λ5	λ6////////////////////////////////////
	3014	λ4	λ5	λ6	λ7

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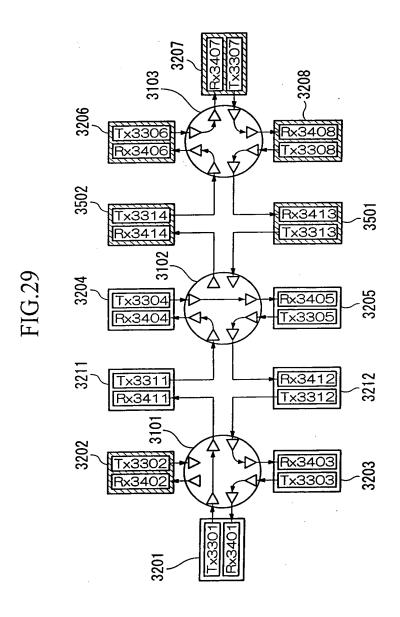
FIG.28

## OPTICAL OUTPUT PORTS

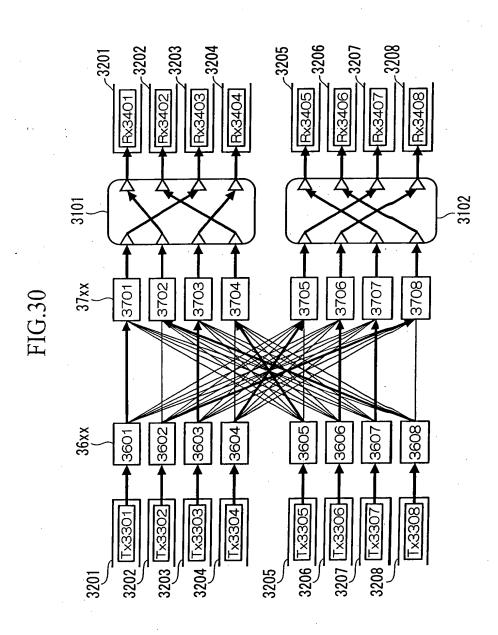
	3021	3022	3023	3024
3011	λ1	λ2	λ3//	λ4
3012	λ2	λЗ	λ4	λ1
3013	λЗ	λ4	λ1	/////////////////////////////////////
3014	λ4	λ1	λ2	λЗ

OPTICAL INPUT PORTS

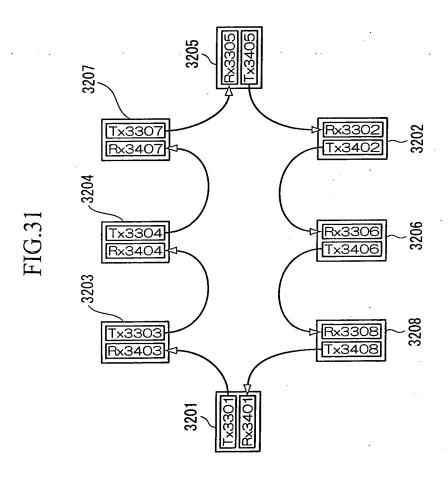
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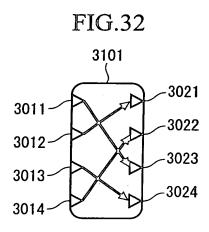


FIG.33
OPTICAL OUTPUT PORTS

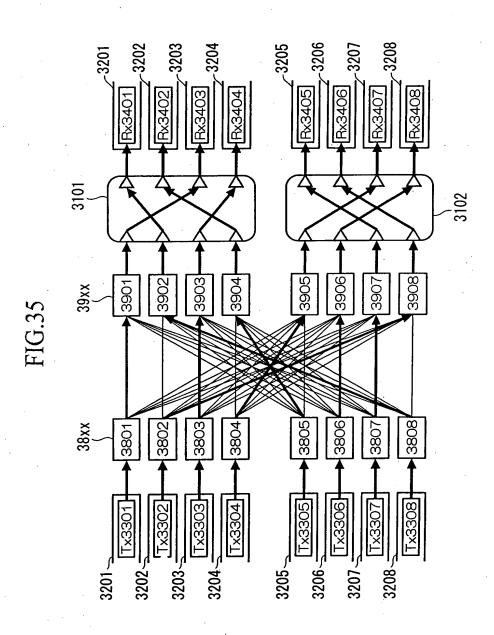
		3021	3022	3023	3024
r Ports	3011	λ1	λ2	λ3//	λ4
- INPUT	3012	λ2	λЗ	λ4	λ5
OPT I CAL	3013	λЗ	λ4	λ5	λ6
	3014	λ4	λ5	λ6·	λ7

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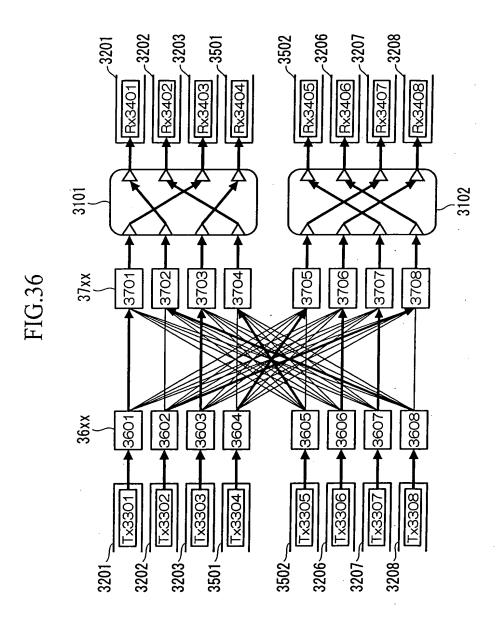
**FIG.34** 

· ·		3021	3022	3023	3024
I PORTS	3011	λ1	λ2	λ3//	λ4
L INPUT	3012	λ2	λЗ	λ4	λ1
OPTICAL	3013	λЗ	λ4	λ1	/////////////////////////////////////
	3014	λ4	/////////////////////////////////////	λ2	λЗ

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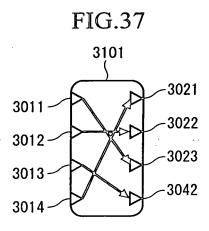


FIG.38
OPTICAL OUTPUT PORTS

		3021	3022	3023	3024
PORTS	3011	λ1	λ2	λ3//	λ4
INPUT	3012	λ2	λ3//	λ4	λ5
OPT I CAL	3013	λЗ	λ4	λ5	/////////////////////////////////////
J	3014	λ4	λ5	٦6	λ7

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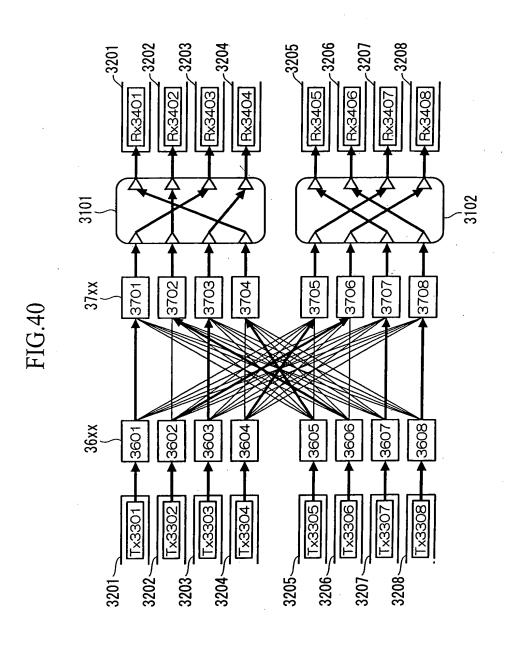
FIG.39

## OPTICAL OUTPUT PORTS

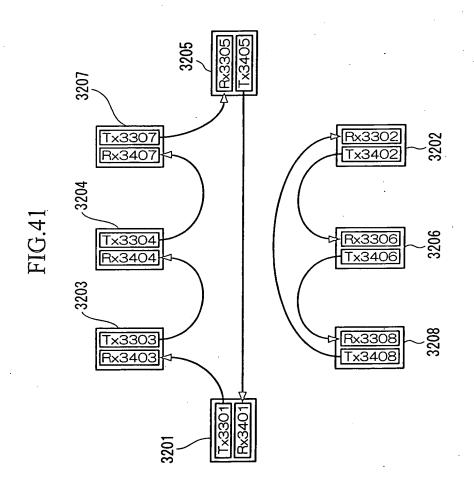
	3021	3022	3023	3024
3011	λ1	λ2	/////////////////////////////////////	۸4
3012	λ2	λ3	λ4	λ1
3013	λЗ	λ4	λ1	/////////////////////////////////////
3014	λ4	λ1	λ2	λЗ

OPTICAL INPUT PORTS

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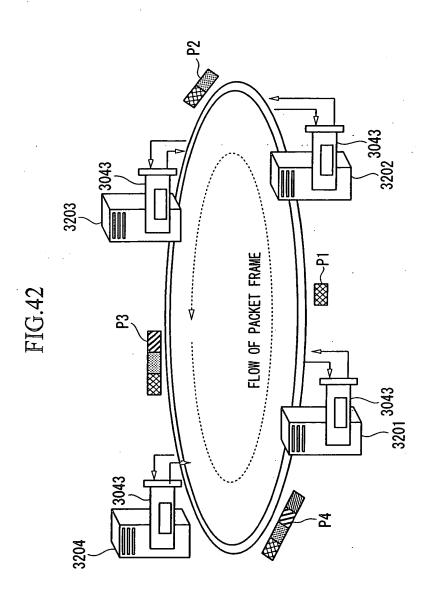


FIG.43A

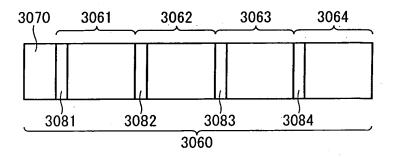
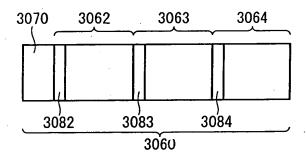
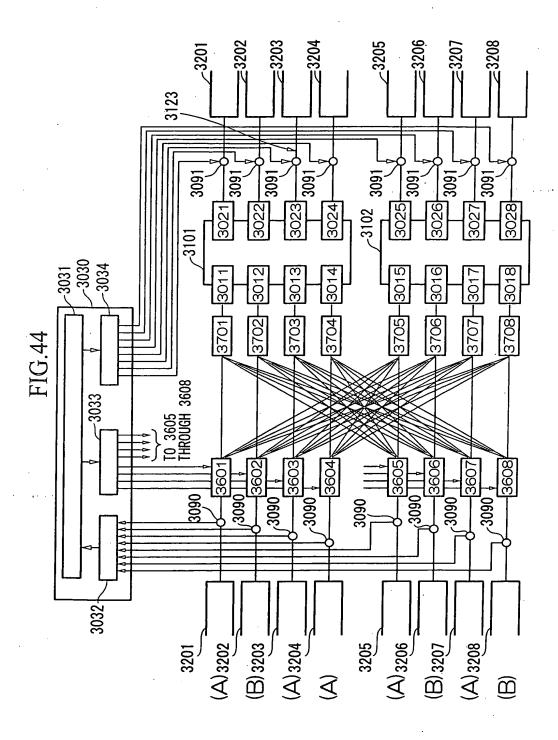


FIG.43B



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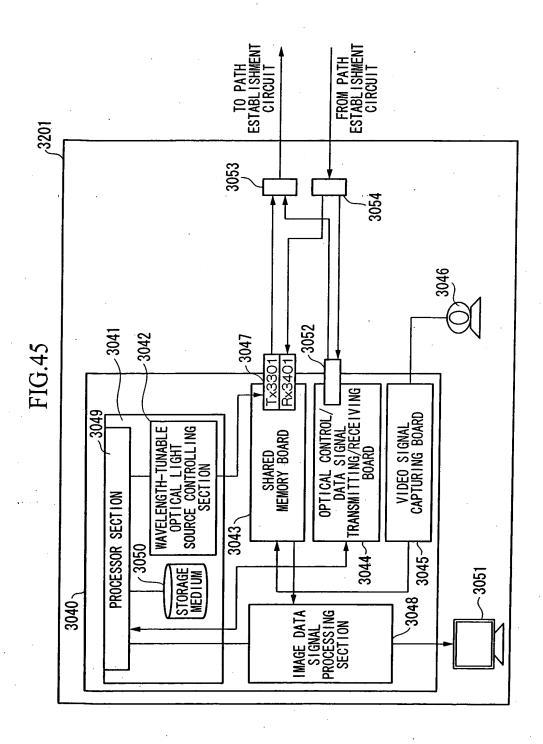
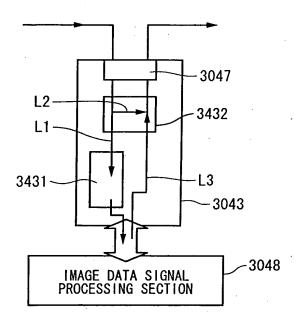
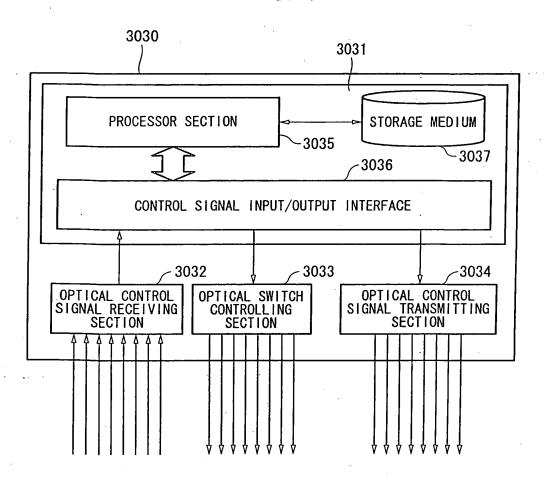


FIG.46



**FIG.47** 



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FIG.48
OPTICAL OUTPUT PORTS

OPTICAL INPUT PORTS

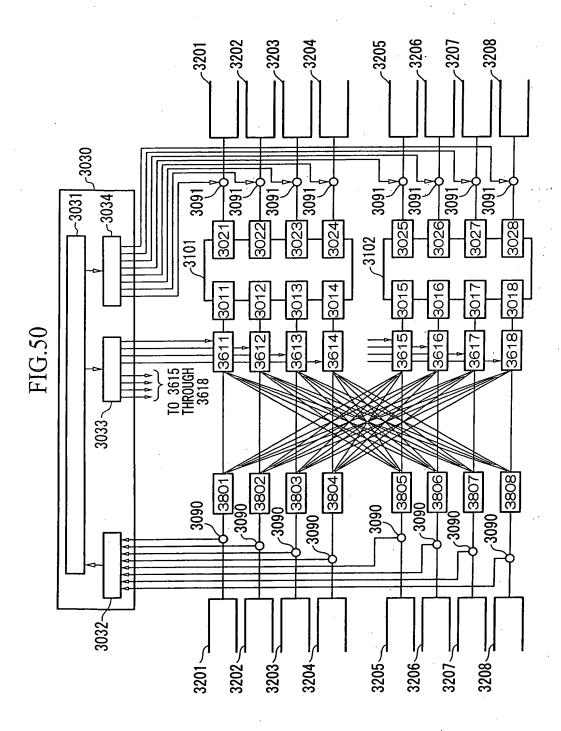
	3021	3022	3023	3024
3011	λ1	λ2.	λ3	λ4
3012	λ2	λЗ	λ4	λ1
3013	λЗ	λ4	λ1	λ2
3014	λ4	λ1	λ2	λЗ

FIG.49
OPTICAL OUTPUT PORTS

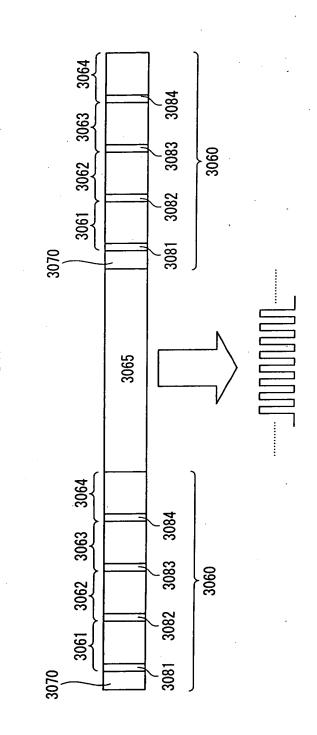
OPTICAL INPUT PORTS

	3025	3026	3027	3028
3015	λ1	λ2	λЗ	λ4
3016	λ2	λЗ	λ4	λ1
3017	λS	λ4	λ1	λ2
3018	λ4	λ1	λ2	λЗ

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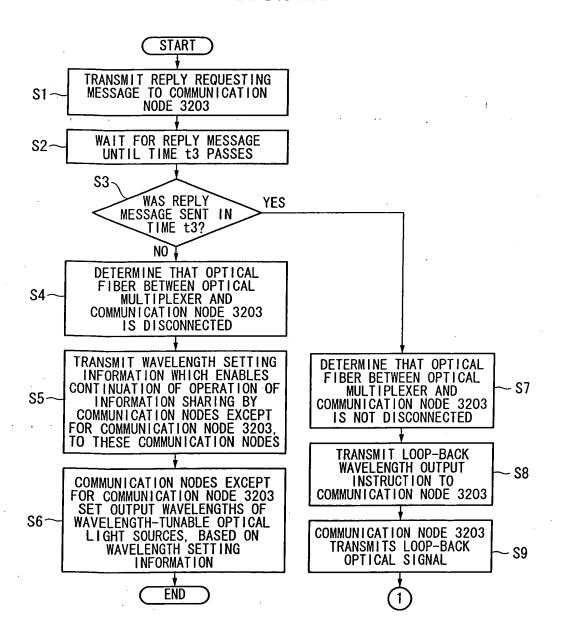


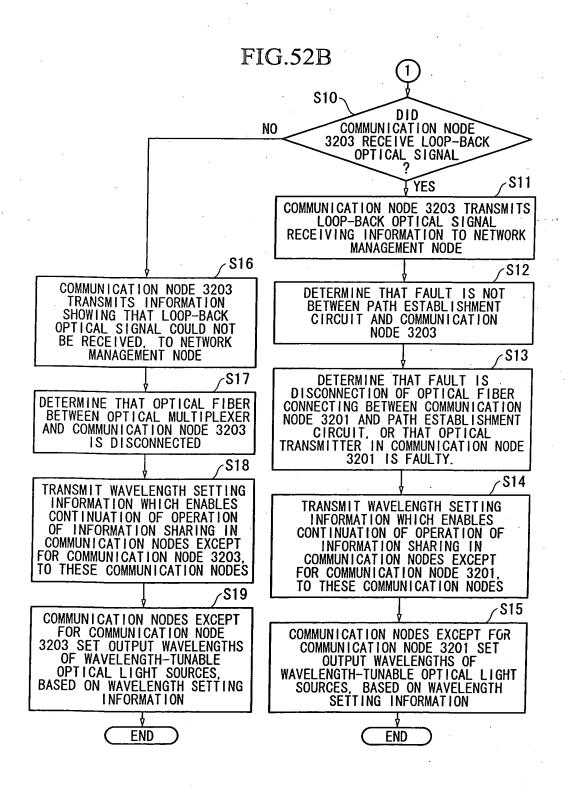
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## FIG.52A





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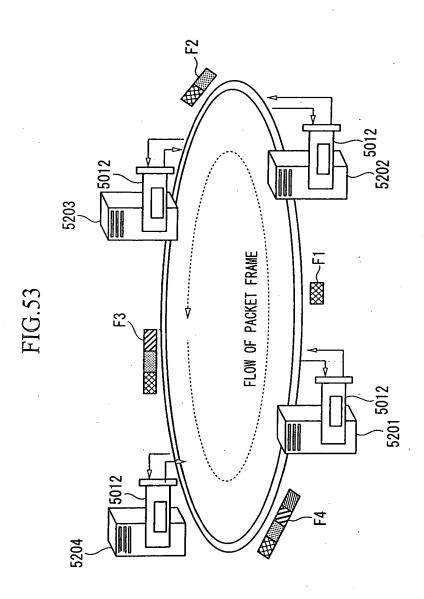


FIG. 54A

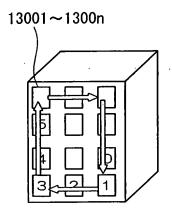


FIG. 54B

